

PCN112

COMPARISON OF CHARACTERISTICS OF COLORECTAL CANCER PATIENTS ADMITTED EMERGENTLY, URGENTLY OR ELECTIVELY IN WEST VIRGINIA HOSPITALS BETWEEN 2003-2007

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OBJECTIVES: Colorectal cancer poses a significant disease burden in West Virginia. Hospitalization followed by surgical resection is the standard curative treatment. Emergency admissions account for more than 25% of colorectal cancer hospitalizations nationwide. The aim of this study is to compare characteristics of West Virginia residents admitted emergently, urgently or electively to West Virginia hospitals between 2003-2007. Another aim was to explain the association between admission type and in-hospital deaths. **METHODS:** Data from the Healthcare Cost and Utilization Project (HCUP), State Inpatient Database were investigated. Descriptive statistics for admission type, comorbidities, in-hospital death, age and sex were tabulated; chi-square analyses helped explain differences in characteristics between admission types. Logistic regression was employed to explain differences in in-hospital deaths between emergency, urgent and elective admissions. **RESULTS:** There were 9380 admissions with a primary or secondary diagnosis of CRC of which 33.1% were emergency admissions, 24.4% urgent and 42.1% elective. Of the in-hospital deaths more than half (50.5%) the cases were admitted emergently compared to electively (23.1%). Among emergency and urgent admissions the most common comorbid conditions were diabetes (17.1%), followed by fluid disorders (6.9%) and hypertension (5.0%). Among elective admissions diabetes (19.9%) was followed by COPD (4.3%) and hypertension (3.5%). Logistic regression showed that the odds of in-hospital death were 3.03 times higher for emergency admission compared to elective after controlling for age, sex, number of comorbidities, diagnosis type and payer. **CONCLUSIONS:** Patients admitted emergently are more likely to die in-hospital compared to those admitted electively. The large percentage of patients admitted emergently indicates advanced disease and possibly failure of timely screening. Comorbid conditions differed by admission type and need further investigation. Diabetes was the most common comorbid condition overall and further investigation in diabetics is needed to check screening behavior and access to screening centers.

PCN113

LEARNING THE LESSONS OF ONCOLOGY HTA REVIEWS IN AUSTRALIA & THE UNITED KINGDOM – A CASE STUDY OF FIVE DRUGS

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OBJECTIVES: HTA agencies have different requirements and preferences in terms of both the models they receive and the clinical evidence that submission are based on. Our aim was to understand what could be learned about the preferences of the PBAC in Australia and NICE and the SMC in the UK specific to oncology from five selected case studies. **METHODS:** Five high-profile cancer drugs, namely Avastin (bevacizumab), Erbitux (cetuximab), Sprycel (dasatinib), Tykerb/Tyverb (lapatinib) and Tarceva (erlotinib) were selected as our research sample. All assessment guidance related to the five drugs by NICE, the PBAC and the SMC were reviewed to examine the rationale behind positive or negative recommendations. Based on the review, we analysed the agencies' preferences for oncology HTA submissions. **RESULTS:** Avastin has been one of the most rejected drugs among the three agencies, with the exception of PBAC's recommendation of listing for 1st line metastatic colorectal cancer treatment on the condition of a patient access scheme. The increase to the overall drug cost by including Avastin in the treatment regimen has been the main concern with other negative factors including the inappropriate choice of comparators. Tykerb received negative recommendations from both PBAC and SMC for breast cancer due to concerns over small trial population size, robustness of efficacy evidence as well as high ICER. Between the 5 drugs, 21 HTA reviews took place, resulting in 11 positive recommendations, 10 rejections and 1 deferred decision for further price negotiation. Out of the positive recommendations, 4 were based on risk sharing arrangements. **CONCLUSIONS:** HTA agencies respond differently to submissions based on the same clinical dossier. Understanding in detail what the evidence preferences are of the individual agencies is crucial of the probability of reimbursement is to be maximised. This understanding should be fed into clinical development and supplementary evidence plans.

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DEVELOPING A FAMILIAL CANCER RISK ASSESSMENT TOOL FOR USE IN UNDERSERVED COMMUNITIES

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OBJECTIVES: Considering human factors in new technology is essential to ensure its acceptance, particularly in underserved communities. This study assessed the usability of the original (Flash) and new (HTML) versions of a self-administered familial cancer risk assessment tool- the Jameslink. **METHODS:** The study was a randomized, hybrid experimental design involving in-person usability testing of predominantly lower-income, African American individuals 18 years or older. Flash and HTML versions of the Jameslink were compared for the outcomes of grade (A-F), personal relevance, ease of use, and time to complete. **RESULTS:** Most of the respondents were female (71.2%) and African American (93.3%), with a mean age of 43.41 (± 13.61) years. Many had annual income < \$25,000 (33.9%) and education of high school degree or less (28.8%). Principal components analysis with Varimax rotation showed one factor solutions with eigen values >1 - Scale 1: ease of use of the program (understandability, organization, going through pages, and printing Jameslink) and Scale 2: relevance of Jameslink (important, interesting,

makes sense, and self-relevant); both scales had excellent internal consistency (Cronbach's alphas = 0.822 and 0.866 respectively). Independent sample t-tests and chi-square analysis revealed that participants felt Flash provided more personally-relevant information and was easier to use compared to HTML. Further, they gave a better grade to Flash, and Flash took less time to complete (all p's < 0.05, adjusted). Grounded theory analysis found that Flash version was clear, concise, informative, but the layout could be improved whereas HTML version was confusing, stressful, complicated, and involved too much typing. **CONCLUSIONS:** Although we made an effort to integrate our familial cancer risk assessment tool in the HTML platform of a larger, personalized health assessment tool from the university, we found that our original Flash version was better accepted in this underserved population. Consideration of human factors is essential to encourage personalized health assessment and understanding of risk status.

PCN115

A CROSS-COUNTRY COMPARISON OF SECOND-LINE MULTIPLE MYELOMA TREATMENTS

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OBJECTIVES: This study seeks to compare the actual cost (minus administration costs) of bortezomib monotherapy treatment versus lenalidomide/dexamethasone therapy in second-line multiple myeloma (MM) in the United States and the United Kingdom. It also reviews decisions on second-line MM made by health technology assessment (HTA) agencies. **METHODS:** The IHS OncoInsight Market Access Database was reviewed to find the ex-manufacturing package price and price per mg of each drug. The average cost per treatment was calculated by multiplying the factory price per mg by the average total mg per treatment, calculated using the official dosage and duration of use from the drugs' labels. All prices were from H1 2010. Additionally, HTA decisions on the drugs were identified. **RESULTS:** The total average treatment cost for the lenalidomide/dexamethasone treatment was \$101,052.75 in the United States and £58,926.78 in the United Kingdom. The total average treatment costs of bortezomib monotherapy were \$17,045.53 and £9,708.2. Using the highest number of doses documented in the APEX study, the totals come to \$34,091.06 and £19,416.4. The U.K. National Institute for Health and Clinical Excellence (NICE) has reviewed both therapies in previously treated MM. In October 2007, NICE recommended bortezomib monotherapy for second-line MM. In June 2009, NICE recommended lenalidomide plus dexamethasone in third-line MM. Both recommendations were subject to a patient access scheme. **CONCLUSIONS:** The overall cost of bortezomib monotherapy was found to be potentially lower than Revlimid plus dexamethasone in second-line MM. Even when taking into account a higher dose regimen for bortezomib monotherapy, its cost is still significantly lower than the lenalidomide combination therapy. However, the mode of administration—injectable versus oral—is likely to be taken into account by payors. These findings are consistent with NICE, which recommends bortezomib monotherapy for second-line treatment and lenalidomide combination only for third-line treatment.

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TRANSFERABILITY OF NICE RECOMMENDATIONS FOR PHARMACEUTICAL THERAPIES IN ONCOLOGY TO CENTRAL-EASTERN EUROPEAN COUNTRIES

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OBJECTIVES: The health status of the population of Central-Eastern Europe (CEE) is worse than that of Western Europe, this is especially true for malignant diseases. Furthermore, these countries have more limited health care resources; therefore, transparent decision criteria, including the assessment of cost-effectiveness in formal health technology assessments (HTA), are an absolute necessity. Unfortunately, the number of trained health economists and prospective health economic trials and the public budget for HTA are not comparable to the major markets of innovative health technologies, such as those of the United Kingdom. Transferability of good quality HTA reports, especially those prepared by the National Institute for Health and Clinical Excellence (NICE), could be highly beneficial to prevent the duplication of efforts and to save resources for local health technology assessments. **METHODS:** We scrutinized the transferability of 68 published NICE appraisals of innovative oncological drugs to CEE countries. The most critical factors influencing the transferability of NICE appraisals were selected based upon differences in measures between UK and CEE countries. **RESULTS:** In general, we can conclude that HTA recommendations by the NICE are not transferable. Certain elements of HTA reports are transferable, but adjustment to local data is absolutely necessary. If the NICE recommendation is positive, the conclusion can be still negative in CEE countries; this is primarily due to relative price differences and the significance of local budget impacts. If the NICE recommendation is negative, the innovative health technology can be still cost-effective in Central-Eastern Europe due to the worse health status of the population and the greater potential health impact on the targeted population. **CONCLUSIONS:** Decision-makers in CEE countries cannot make excuses; they must improve the appropriateness of reimbursement decisions to increase the allocative efficiency of health care financing, but copying NICE recommendations without local adjustment may do more harm than good.

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ASSOCIATION OF HEALTH-RELATED QUALITY OF LIFE (HRQOL) WITH ISS STAGE AND ECOG STATUS IN MULTIPLE MYELOMA

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